

ALKALINE CELL WITH FLAT HOUSING

ABSTRACT OF THE DISCLOSURE

An alkaline cell having a flat housing, preferably of cuboid shape. The cell can have an anode comprising zinc and a cathode comprising MnO_2 . The housing can have a relatively small overall thickness, typically between about 5 and 10 mm. Cell contents can be supplied through an open end in the housing and an end cap assembly inserted therein to seal the cell. There can be a gap between separator and cathode for insertion of additional electrolyte. The end cap assembly includes a vent mechanism, preferably a grooved vent, which can activate, when gas pressure within the cell reaches a threshold level typically between about 250 and 800 psig (1724×10^3 and 5515×10^3 pascal gage). The cell can have a supplemental vent mechanism such as a laser welded region on the surface of the housing which may activate at higher pressure levels.